

In the Specification:

On page 1, after the title insert the following:

RELATED APPLICATIONS

This is a U.S. national stage of International Application No. PCT/EP2005/000176, filed on January 11, 2005.

This patent application claims the priority of German patent application no. 10 2004 010 613.4 filed March 2, 2004, the disclosure content of which is hereby incorporated by reference.

FIELD OF THE INVENTION

On page 1, before line 14, insert the following heading:

BACKGROUND OF THE INVENTION

On page 2, before line 36, insert the following heading:

SUMMARY OF THE INVENTION

On page 2, amend the paragraph beginning on line 36 through page 3, line 2 as follows:

~~The invention is based on the~~ One object of the invention is to provide ~~specifying~~ a magnetic field sensor and a method for the operation thereof which result in a better behavior of the magnetic field sensor.

On page 3, delete the paragraph beginning on line 4 through line 8 in its entirety and insert the following:

This and other objects are attained in accordance with one aspect of the invention directed to a magnetic field sensor. A sensor arrangement is supplied by a supply device and generates a sensor signal. An evaluation device to which the sensor signal is fed, outputs a first output signal corresponding to the amplitude of the sensor signal. A feedback device, to which the first output signal is fed, controls the supply device such that the first output signal remains substantially constant.

On page 5, before line 25, insert the following heading:

BRIEF DESCRIPTION OF THE DRAWINGS

On page 6, before line 4, insert the following heading:

DETAILED DESCRIPTION OF THE DRAWINGS

On page 10, amend the paragraph beginning on line 1 as follows:

Finally, Figure 3 shows for illustration purposes the rotation sensor arrangement known from EP 0916074 B1. On a rotation axis DA, a magnet is fitted above a Hall element [[H]] H1 with downstream evaluation circuit. The invention now enables an improved measurement and evaluation having a largely independent signal-to-noise ratio relative to changes in distance between magnet and Hall element arrangement. In principle, signal changes based on a Hall element/magnet ratio tilted from the vertical or a non-central Hall element/magnet relationship can also be at least partly compensated for and thus enable a better useful signal.

On page 10, after line 17, insert the following:

The scope of protection of the invention is not limited to the examples given hereinabove.

The invention is embodied in each novel characteristic and each combination of characteristics, which includes every combination of any features which are stated in the claims, even if this combination of features is not explicitly stated in the claims.